

C L A I M S

1. A polymer membrane for the separation of components of natural gas, that comprises an asymmetric
5 hollow fibre of polyethersulphone for the purposes of pervaporation, treated with mixtures of liquids ($C_2H_5OH + X$), in which X = toluene, acetone, dimethylformamide, with a content of $X=7-12\%$ (by volume) in the mixture, subsequently treated with a solution at 2.5% (by volume)
10 of urethanosiloxane in isopropyl alcohol.

2. A polymer membrane, according to claim 1, characterised in that a hollow fibre membrane of polyethersulphone is used, modified with a gaseous
15 mixture [$(F_2 - HF) : \text{inert gas}$] with content of $(F_2 - HF)$ in the range $0-90\%$ (by volume), and concentration of HF in fluorine of $4-6\%$ (by volume).